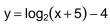
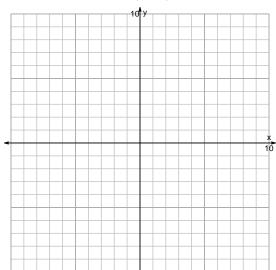
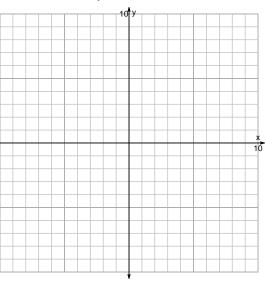
s18quiz: EXP LOG (Practice v131)

1. Graph  $y = \log_2(x+5) - 4$  and  $y = 2^{x-4} + 3$  on the grids below. Also, draw any asymptotes with dotted lines.





$$y = 2^{x-4} + 3$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-5}{7}\right) \cdot 10^{3t/4}$$

3. An exponential function  $f(x) = 0.667 \cdot e^{0.998x}$  is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(2.2).

- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(0.9)$ .